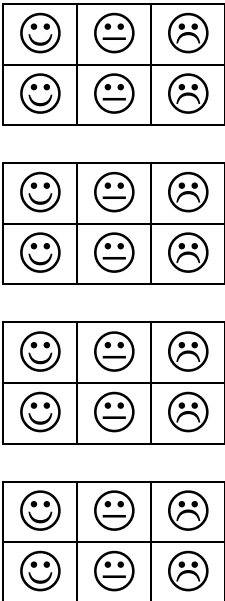
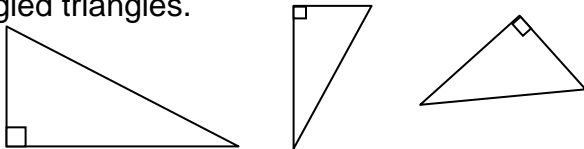
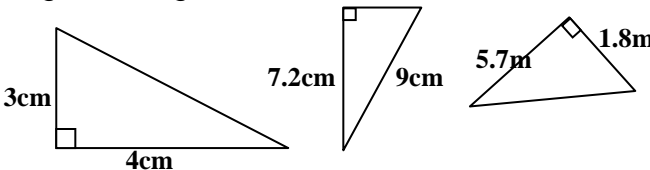
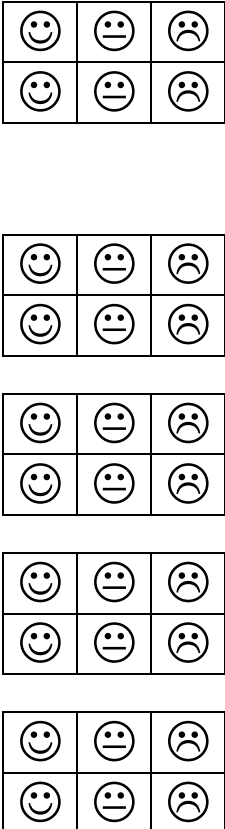
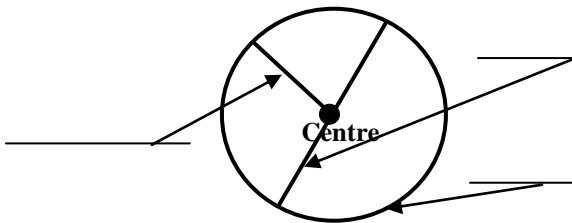
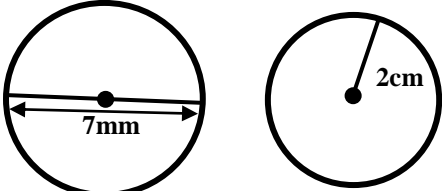


## S2 Block 6

Topic	I can?	Example of Evidence
<b>TRIANGLES/PYTHAGORAS</b>  <b>A:</b> I can accurately draw a triangle given the length of one side and 2 angles.  <b>B:</b> I can accurately draw a triangle given the lengths of all 3 sides.  <b>C:</b> I can identify the hypotenuse in a right angled triangle   <b>D:</b> I can calculate the lengths of an unknown side in a right angled triangle if I know the other two sides		<p>Draw a triangle ABC with side <math>AB = 5\text{cm}</math>, angle <math>CAB = 50^\circ</math> and angle <math>ABC = 35^\circ</math></p> <p>Draw a triangle XYZ with <math>XY = 6.5\text{cm}</math>, <math>YZ = 5\text{cm}</math> and <math>XZ = 4\text{cm}</math></p> <p>Mark the hypotenuse in each of these right angled triangles.</p>  <p>Calculate the missing side in these right angled triangles.</p> 
<b>CIRCLES</b>  <b>E:</b> I can describe the properties of a circle.   <b>F:</b> I can accurately draw a circle using the appropriate equipment.  <b>G:</b> I can calculate the circumference of a circle  <b>H:</b> I can calculate the area of a circle  <b>I:</b> I can find the perimeter and area of a fraction of a circle		<p>Name the parts of the circle.</p>  <p>Draw a circle with radius 4cm. Draw a circle with diameter 11cm.</p> <p>What is the formula to find the circumference of a circle? What is the formula to find the area of a circle?</p> <p>Find the circumference and area of each of these circles.</p> 

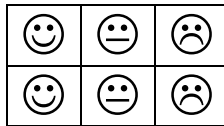
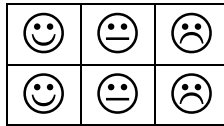
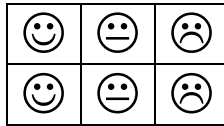
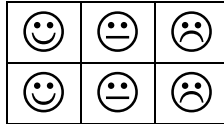
## RATIO AND PROPORTION

**J:** I can find ratios between quantities.

**K:** I can share quantities into a given ratio.

**L:** I know when quantities are in direct proportion and I can use direct proportion to solve problems.

**M:** I know when quantities are in inverse/indirect proportion I can use inverse proportion to solve problems.



X X X O O X X X O X X X O O  
What is the ratio of X:O?

Share £3480 in the ratio 5:1  
Share £486 in the ratio 2:7

Describe direct proportion.  
If 5 calculators cost £24.25, what is the cost of 8 calculators?

Describe inverse/indirect proportion.  
3 people take 3 hours to deliver some letters. At the same speed how long would it take 6 people to deliver the same number of letters?

## MEASURE AND SCALE

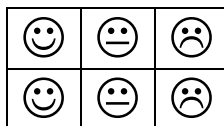
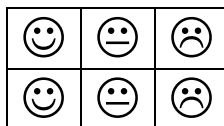
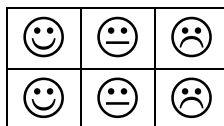
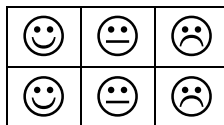
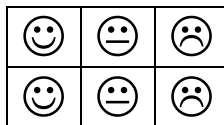
**P:** I can enlarge or reduce pictures and shapes, using different methods, including technology.

**K:** I know when bearings are used in everyday life and can give examples of technology used in navigation.

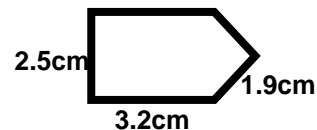
**L:** I can draw 3-figure bearings.

**M:** I can measure 3-figure bearings and write the bearing using the correct notation.

**N:** I know when to use a scale drawing.



Make an accurate drawing of this diagram then reduce it to a third of its size



Make an accurate drawing of this shape then draw a two times enlargement

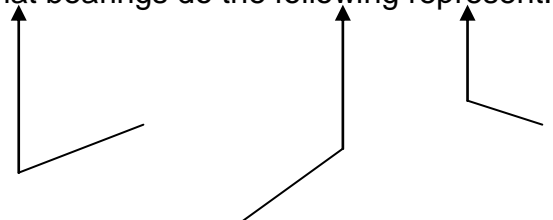
When are bearings used in everyday life?

What instruments are used to measure bearings?

Draw a diagram to represent the following bearings:-

a)  $045^\circ$       b)  $125^\circ$       c)  $300^\circ$

What bearings do the following represent:-



When is a scale drawing useful?

<p>O: I can use scales and bearings to create plans and scale drawings of routes and journeys.</p> <p>P: I can use my knowledge of scales and bearings to interpret maps and plans.</p>	<div data-bbox="669 37 891 159"> </div> <div data-bbox="669 304 891 426"> </div>	<p>A ship sails for 5km on a bearing of <math>070^\circ</math>. It changes direction and sails for 3km on a bearing of <math>135^\circ</math>. Draw a scale drawing to represent this and calculate how far and on what bearing it would have to sail to return to the start.</p> <p>How far is it from A to B on this map? What is the bearing of A from B?</p> <div data-bbox="922 367 1226 483"> </div> <p>Scale: 1cm represents 5km</p>
<p><b>QUADRILATERALS/POLYGONS</b></p> <p>Q: I can discuss the properties of quadrilaterals.</p> <p>R: I can discuss the properties of polygons.</p> <p>S: I can draw a variety of quadrilaterals using a ruler and protractor.</p> <p>T: I can draw regular polygons using a ruler and protractor.</p>	<div data-bbox="669 588 891 709"> </div> <div data-bbox="669 783 891 905"> </div> <div data-bbox="669 940 891 1062"> </div> <div data-bbox="669 1318 891 1440"> </div>	<p>Describe the following quadrilaterals:-</p> <div data-bbox="917 598 1526 745"> </div> <p>Describe:- a) hexagon    b) pentagon    c) octagon</p> <p>Accurately draw the following:-</p> <div data-bbox="917 955 1534 1239"> <div data-bbox="917 955 1161 1239"> <p>a)</p> </div> <div data-bbox="1242 955 1534 1239"> <p>b)</p> </div> </div> <p>Accurately draw the following:-</p> <p>a) a regular hexagon with sides 4 cm</p> <p>b) a regular octagon with sides 3cm</p>